



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

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OFFICE OF THE  
REGIONAL  
ADMINISTRATOR

DEC 04 2012

Ted Sturdevant, Director  
Department of Ecology  
300 Desmond Drive Southeast  
Lacey, Washington 98503

Dan Newhouse, Director  
Department of Agriculture  
1111 Washington Street Southeast  
Olympia, WA 98504

Dear Mr. Sturdevant and Mr. Newhouse:

I understand that your agencies are working on proposals to modify the requirements for livestock operations and would like EPA's perspectives regarding protection of groundwater which is used as a source of drinking water. Our primary goal in this regard is to reduce risk to human health from nitrate contamination in underground sources of drinking water. We believe there are three main areas that the current requirements, as we understand them, could be significantly improved

First, the state should prohibit in most instances the construction of manure lagoons on sites that have a significant risk of nitrate transport to groundwater that serves as a source of drinking water. Where there are no feasible alternatives to the construction of such lagoons, the state should prescribe requirements for liner design, construction, review and certification that will prevent groundwater contamination. Existing manure lagoons in areas with documented groundwater quality problems should be assessed to determine if they are discharging to groundwater and brought up to new standards if needed. My staff can provide more detail on programs from other states that could be looked to as a model.

Second, the state should require that livestock operations and third party recipients of waste that land apply liquid and/or solid waste take additional steps to ensure that manure application fields are not a source of nitrate to the groundwater. It is our understanding that the application of manure that has been transferred to a third party is currently not regulated. All parties applying manure or manure in combination with synthetic fertilizer, including third parties, should implement annual nutrient management plans based on current, annual soil and waste analysis, and application rates should be limited to agronomic rates. Irrigation management practices should also be prescribed to prevent downward migration of nitrates.

Third, the state should impose groundwater-monitoring requirements on large livestock operations that are potential significant sources of nitrates to a drinking water aquifer. The specific monitoring system should be designed by a licensed hydrogeologist and include both upgradient and downgradient monitoring. Where nitrate contamination is detected by the monitoring system, the state should require the facility to take additional steps to address the sources. Additional steps should include reduced application rates of nutrients as determined by on site analysis.

The EPA believes that having safe drinking water and a healthy agricultural economy are complementary goals that can be achieved. My technical staff is available to provide more details if needed. Please contact me directly or have your staff contact Tom Eaton, Director of our Washington Operations Office at (360) 753-8086 or by email at [eaton.thomas@epa.gov](mailto:eaton.thomas@epa.gov).

Sincerely,

A handwritten signature in dark ink, appearing to read "Dennis J. McLerran", is written over a faint, larger version of the same signature.

Dennis J. McLerran  
Regional Administrator

cc: Mark Clark, Executive Director  
Washington State Conservation Commission

bcc: Tom Eaton  
Marie Jennings  
Eric Winiecki  
Ed Kowalski  
Dan Opalski